Synopsys Extends Market Leadership in Verification Hardware with Performance and Enterprise Scalability Innovations

HAPS-100 Delivers 2x Higher Prototype Performance and 4x Higher Debug Performance for Software and Hardware Verification of Complex SoCs

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Highlights:

- Fastest performance for software development and system validation with 20-50 MHz for complex SoCs and up to 500 MHz for interface IP
- Highest debug productivity through innovative system architecture with 4x signal capture and 4x higher debug performance
- Enterprise and ecosystem scalability through HAPS Gateway software enabling multi-design, multi-user parallelization
- Proven direct connect architecture leveraging largest prototyping ecosystem and broadest portfolio of interface cards

Synopsys, Inc. (Nasdaq: SNPS) today announced its latest powerful innovation in prototyping, delivering the fastest performance, highest debug productivity and unmatched enterprise scalability to accelerate software development, system validation and verification. The HAPS®-100 prototyping system, part of the Synopsys Verification Continuum® Platform, allows designers, software developers and verification engineers to work from anywhere, through the HAPS Gateway, to manage multi-design, multi-user deployment for maximum productivity and cost efficiency.

Electronics companies face continued pressure to accelerate time-to-market despite increasing system-on-chip (SoC) and software complexity. To meet this demand, they require faster prototyping systems with higher debug performance and accessibility across geographies, ecosystem partners and work locations. 5G, AI, automotive, and GPU SoC designers are benefitting from 20-50 MHz prototyping performance and 10x faster throughput compared to alternative solutions, enabling them to deploy a shift-left design strategy and decrease their time-to-market.

"We have seen tremendous growth in demand for HAPS to accelerate software development and system validation of advanced SoC designs," said Manoj Gandhi, general manager of the Verification Group at Synopsys. "The HAPS-100 architecture and software build on our market-leading technology and are the result of deep collaboration with many industry-leading customers to deliver breakthroughs in prototyping performance, debug, and enterprise scalability to accelerate their system innovation."

The flexible direct connect architecture of HAPS enables designers to leverage the largest prototyping ecosystem and the broadest portfolio of HAPS interface cards. HAPS prototyping software builds upon Synopsys' 20+ years of experience in FPGA synthesis and delivers the highest performance using timing optimization for the direct connect architecture. Synopsys customers also benefit from Synopsys DesignWare® IP Prototyping Kits, which are critical to accelerate IP integration, software development and system validation delivering prototyping speeds of up to 500 MHz.

Customer Testimonials:

- "We are working at the leading edge of innovation to bring our GPUs and AI and ADAS SoCs to market," said Narendra Konda, senior director Hardware Engineering at Nvidia. "We are now deploying HAPS-100 across our most demanding GPU projects enabling our software teams to achieve the fastest pre-silicon software development turn-around time."
- "In the heavily contested AI market it is critical to be able to develop and demonstrate our new architecture for cloud AI applications quickly," said June Paik, CEO at Furiosa. "HAPS-100 delivers the highest performance, making it an easy choice for our hardware and software teams. We plan to leverage the worldwide deployment of HAPS systems and its ecosystem to engage with semiconductor and system companies interested in our new architecture for cloud AI applications."

Availability & Resources
The Synopsys HAPS-100 prototyping system is available now.

About Synopsys
Synopsys, Inc. (Nasdaq: SNPS) is the Silicon to Software™ partner for innovative companies developing the electronic products and software applications we rely on every day. As an S&P 500 company, Synopsys has a long history of being a global leader in electronic design automation (EDA) and semiconductor IP and offers the industry's broadest portfolio of application security testing tools and services. Whether you're a system-on-chip (SoC) designer creating advanced semiconductors, or a software developer writing more secure, high-quality code, Synopsys has the solutions needed to deliver

innovative products. Learn more at www.synopsys.com.

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